Chappellier. The tubers are club shaped, tapering to a finger size at the upper part, and when grown in the open are generally about 9 to 10 inches long and weigh 12 to 14 ounces when fully grown. Occasionally twin tubers develop on a single plant, but they are then of medium size. This yam may be multiplied either by means of cuttings of the tuber or by means of bulbils. The size of the eventual tuber seems to depend a good deal on the size of the piece from which the plant was grown. By far the most important mode of multiplication is by bulbils. (Adapted from The Hardy Yams, by Dr. H. E. Durham, in The Gardeners' Chronicle, 3d ser., vol. 69, p. 18.)

"The stem of the vine is roundish; the leaf blade is heart-shaped, smooth, upper surface shining, with reddish purple at base of blade." (R. A. Young.)

54049. Datura rosei Safford. Solanaceæ.

From Ibarra, Ecuador. Seeds collected by Wilson Popenoe, Agricultural Explorer of the Department of Agriculture. Received July 21, 1921.

"(No. 625a. Hacienda La Rinconada, Ecuador. June 13, 1921.) Huantuc. A yellow-flowered form of the common arborescent Datura which is cultivated about the huts of the Indians all through the Ecuadorian highlands. The plant sometimes grows to 15 or 18 feet; its tubular flowers are about 6 inches long, 2 inches broad at the mouth, and of a rich deep-yellow color. The plant is worthy of trial as an ornamental in protected situations throughout southern California and in southern Florida." (Popenoe.)

A cluster of the tubular flowers and a fruit of this arborescent Datura are shown in Plate IV.

54050 to 54053.

From San Jose, Costa Rica. Seeds presented by Carlos Wercklé. Received July 16, 1921. Quoted notes by Mr. Wercklé except as otherwise stated.

54050. Couepia floccosa Fritsch. Rosaceæ.

" Olosapo, sapotilla de olor."

A stout-branched, hoary Guatemalan plant with elliptic to obtuse leaves 1 to 4 inches long, cobwebby above when young, and white tomentose beneath. The small flowers in short reddish tomentose panicles are followed by villose fruits. (Adapted from Fritsch, Beitrage zur Kenntniss der Chrysobalanaecen, II. In Annalen des K. K. Naturhistorischen Hofmuseums, vol. 5, p. 12.)

54051. Casimiroa edulis La Llave. Rutaceæ. White sapote.

"The largest variety that I know; the fruit is very good and weighs from 1 to $1\frac{1}{2}$ pounds."

"A medium-sized erect or spreading tree, having palmately compound leaves, small inconspicuous flowers, and yellowish green fruits the size of an orange. The fruits have a thin membranous skin, yellowish flesh of soft melting texture and sweet or slightly bitter flavor, and one to five large oval or elliptic seeds.

"In its native region the white sapote is a fruit of the highlands. Throughout Mexico and Guatemala it is found at altitudes of 2,000 to 3.000 feet, and occasionally as high as 9,000 feet. It is not grown in regions subject to heavy rainfall." (Wilson Popenoe.)

For previous introduction, see S. P. I. No. 47565.

54052. Rheedia edulis (Seem.) Planch. and Triana. Clusiaceæ.

"A handsome pyramidal tree 20 to 25 feet high with deep-green glossy oblong-lanceolate leaves 4 to 6 inches long. The elliptic bright orange-yellow fruits 2 inches long and 1½ inches in diameter have thick terebinthinous skin which separates easily from the snowy white, juicy, melting pulp. The flavor is acid unless the fruit is almost overripe, and strongly resembles that of Lansium domesticum. The one to three seeds are about an inch long and adhere closely to the pulp; when cut